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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,854	09/13/2005	Kazuyuki Watanabe	5866-19	4006

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EXAMINER

THOMPSON, TIMOTHY J

ART UNIT PAPER NUMBER

2873

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/531,854

Applicant(s)

WATANABE ET AL.

Examiner

Timothy J. Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 2-5 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

The indicated allowability of claims 2-5 is withdrawn in view of the newly discovered reference(s) to Tsuchida(U.S. Pat. No. 6,163,411). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsuchida(U.S. Pat. No. 6,163,411).

Regarding claim 2, Tsuchida discloses a lens drive apparatus for moving lenses in a lens unit having an optical zoom function for use in an ultra miniature camera(col 9, lines 10-15) which uses lenses having an optically effective lens diameter of 7 mm or less(embodiment 2), having: a first and second lens support members arranged in the front and back(lens supports are inherently disclosed being a structure must be used so as to hold the lenses in there desired position); wherein each of said first and second lens members holds a prescribed number of lenses(fig 1, r1-r2, r3-r4); said first lens support member is made movable in the forward and backward directions, and is

constructed so as to stop at two prescribed positions in the forward and backward directions; said second lens support member is made movable in the forward and backward directions, and is constructed so as to stop at two prescribed positions in the forward and backward directions(fig 2); whereby it is possible to switch between two kinds of zoom magnification by controlling the stopping positions of said first and second lens support members(fig 2).

Regarding claim 3, Tsuchida discloses a lens drive apparatus for moving lenses in a lens unit having an optical zoom function for use in an ultra miniature camera(col 9, lines 10-15) which uses lenses having an optically effective lens diameter of 7 mm or less(embodiment 2), having: a first and second lens support members arranged in the front and back(lens supports are inherently disclosed being a structure must be used so as to hold the lenses in there desired position); wherein each of said first and second lens members holds a prescribed number of lenses(fig 1, r1-r2, r3-r4); said first lens support member is made movable in the forward and backward directions, and is constructed so as to stop at two prescribed positions in the forward and backward directions; said second lens support member is made movable in the forward and backward directions, and is constructed so as to stop at three prescribed positions in the forward and backward directions(fig 2); whereby it is possible to switch between two kinds of zoom magnification by controlling the stopping positions of said first and second lens support members(fig 2).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchida(U.S. Pat. No. 6,163,411) as applied to claim 1 above, and further in view of Himmelsbach(U.S. Pat. No. 4,008,951).

Regarding claim 4, Tsuchida does not disclose the movement of at least one of said first lens support member and said second lens support member is carried out based on the output of a stepping motor. However, Himmelsbach discloses the movement of at least one of said first lens support member and said second lens support member is carried out based on the output of a stepping motor(fig 1, 8, col 3, lines 25-28). It would have been obvious to one skilled in the art at the time of the invention to use a stepping motor to move the second lens unit as shown by Himmelsbach, in the lens device of Tsuchida, since as shown by Himmelsbach stepping motors are commonly used for driving the lens.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchida(U.S. Pat. No. 6,163,411) as applied to claim 1 above, and further in view of Takizawa et al.(U.S. Pat. No. 7,079,333).

Regarding claim 5, Tsuchida does not disclose at least one solenoid, relay or permanent magnet is used as an actuator to move said first lens support member and

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said second lens support member, whereby the switching of the two kinds of relative positional relationship can be controlled by moving the first and second lens support members in accordance with the output of the actuator. However, Takizawa et al. permanent magnet is used as an actuator to move said first lens support member and said second lens support member, whereby the switching of the two kinds of relative positional relationship can be controlled by moving the first and second lens support members in accordance with the output of the actuator (fig 1, fig 11). It would have been obvious to one skilled in the art at the time of the invention to use permanent magnet is used as an actuator to move said first lens support member and said second lens support member as shown by Takizawa et al., in the lens device of Tsuchida, since as shown by Takizawa et al. permanent magnet is used as an actuator to move said first lens support member and said second lens support member are commonly used for driving lens elements.

Allowable Subject Matter

Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The specifics to how the lens support members are driven.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Thompson whose telephone number is (571) 272-2342. The examiner can normally be reached on 8:30 AM - 6:00 Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on (571) 272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**TIMOTHY THOMPSON
PRIMARY EXAMINER**